



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,725	04/15/2004	Jutta Lindemann	63665.00001	8868

7590 07/14/2005

SQUIRE, SANDERS & DEMPSEY L.L.P.  
Two Renaissance Square  
Suite 2700  
40 North Central Avenue  
Phoenix, AZ 85004-4498

EXAMINER
----------

CHEUNG, WILLIAM K

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/825,725

Applicant(s)

LINDEMANN, JUTTA

Examiner

William K. Cheung

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2005.  
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.  
4a) Of the above claim(s) 22-25 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Applicant's affirmed election of Group I invention, claims 1-21, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Therefore, in view of lack of traversal to restriction requirement set forth from Response to Restriction Requirement, the restriction set forth by the examiner is deemed proper and is therefore made Final.
2. Claims 1-25 are pending. Claims 22-25 are drawn to non-elected subjected matter. Claims 1-21 are examined with merit.

### ***Information Disclosure Statement***

3. The information disclosure statement filed May 17, 2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information. The references cited in IDS are not related to the resin system being claimed. Instead, the references cited in IDS are

Art Unit: 1713

pertaining to algorithms of information processing. The IDS has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makino et al. (US 6,552,130 B1).

*The invention of claims 1-21 relates to a (meth)acrylate resin comprising:*  
**20-85 % by weight (meth)acrylate**

Art Unit: 1713

**10-40 % by weight of a *polymer* soluble in (meth)acrylate**

**0.1-2 % by weight *paraffin***

**0-50 % by weight *hydroxyl(meth)acrylate***

**0.1-2 % by weight *adhesion promoter*.**

Makino et al. (abstract; col. 12-23, working examples, Tables and comparative examples; col. 23, claims 1-5) disclose methacrylate resin compositions that are very similar to the resin composition as claimed. Makino et al. (col. 12, line 20-26) disclose a composition comprising MMA, TEGDMA, and at mixture paraffin waxes having different melting points as claimed). Regarding the claimed adhesion promoter, Makino et al. (col. 10, line 3) clearly indicate the use of silane coupling agent for improving the bonding strength of resin with the fillers. Regarding the claimed stabilizer, Makino et al. (col. 10, line 15-20) clearly disclose using 2,4-dimethyl-t-butylphenol for improving storage stability. Makino et al. (col. 10, line 38-49) teach the incorporation of pigment and dye to the disclosed resin composition. Makino et al. (col. 19, line 20-32) disclose the composition comprising the use of benzoyl peroxide with dimethyl p-toluidine as accelerator. Makino et al. (col. 10, line 14) also disclose using defoaming agents.

The difference between the invention of claims 1-19, 21 and Makino et al. is that Makino et al. are silent on a single embodiment comprising a hydroxyl (meth)acrylate. Regarding claims 14-15, the further difference between the invention of claims 14-15

Art Unit: 1713

with Makino et al. is that Makino et al. are silent on the specific combination of primary and secondary stabilizers as claimed.

Regarding the claimed "hydroxyl(meth)acrylate", Makino et al. (col. 3, line 19-48) disclose a list of functionally equivalent (meth)acrylic acid ester for the disclosed composition. Motivated by the expectation of success of obtaining resin system that can be cured by redox-type polymerization initiator (col. 1, line 26-32), it would have been obvious to one of ordinary skill in art to use a mixture of the disclosed list of functionally equivalent (meth)acrylic acid ester to obtain the invention of claims 1-19, 21. According MPEP 2144.07, "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be prima facie obvious.). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992)

Art Unit: 1713

(mixture of two known herbicides held prima facie obvious). But see *In re Geiger*, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987).

Regarding claims 14-15, since Makino et al. (col. 10, line 15-20) clearly disclose using 2,4-dimethyl-t-butylphenol for improving storage stability. Motivated by the expectation of success that the disclosed composition can be benefited from using a stabilizer, it would have been obvious to one of ordinary skill in art to look for other stabilizer, especially the combination use of common primary and secondary stabilizers such as the ones as claimed from the major additive suppliers for further stabilization improvement to obtain the invention of claims 14-15.

Regarding claim 20 which claims the viscosity of the obviated composition, in view of substantially identical composition between the composition of claim 20 and the obviated composition of Makino et al., the examiner has a reasonable basis to believe that the claimed viscosity of claim 20 is inherently possessed in Makino et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Primary Examiner

July 10, 2005

**WILLIAM K. CHEUNG  
PRIMARY EXAMINER**